IN THE SPECIFICATION

Please make the following changes referencing the paragraph and line numbers of the originally submitted application:

Please change the paragraph beginning at page 2, line 29 with the following rewritten paragraph:

The gearbox may also have other features such as a unit having a split shaft with a clutch for producing additional torques in the gearbox other than the product calculated by multiplying the number of gearsets in the units. The gearbox may also have a reverse pinion to provide reverse speeds. A differential may be used on the ~~drive~~ output shaft. The gears may have two faces of teeth which may be switched as the gears wear down. Further, the gearbox may come in sections with different frame members, the shafts extending between the sections.

Please change the paragraph beginning at page 3, line 7 with the following rewritten paragraph:

The combination of using degrees of a common ratio for the gear sizes in a gearbox with the same degree of common ~~ration~~ ratio difference in each unit f the gearbox and using the ratio of the number speeds to shafts plus gears results in the most efficient gearbox.

Please change the sentence beginning at page 5, line 9 with the following rewritten sentence: ?Fig. 2F is a table of ratios...

Please replace the paragraph beginning on page 6, line 7 with the following rewritten paragraph.

Fig. 6 is a schematic of a gearbox with 4 shafts and 3 units of gearsets therebetween having 2, 3, and 4 gearsets respectively in the units. Three units A, B and D of gearsets having three-separated frames members as frame members of reverse mechanism.

Please replace the paragraph beginning on page 6, line 28 with the following rewritten paragraph.

In the embodiment shown there are generally 24 forward and 12 or 24 reverse gears available in gearboxes with 4 or 5 shafts and 6 reverse gears in gearbox with 3 shafts. A gearbox having split shaft with 5 shafts can ~~produced~~ produce 68 gears having 36 forward and 24 reverse gears, plus 2 forward and 2 reverse gears as a power take off. In the embodiment shown in FIG. 2.1 the same gearbox as shown in FIG. 2 is driven on the opposite side of the split shaft and the shaft has been turned over for use of the gears on the opposite side of the teeth to double the life of the gears in the gearbox. The gearbox in FIG. 2.1 has ~~as~~ an additional 2 forward and 2 reverse gears for power take off compared to the gearbox in FIG. 2. The gearbox in FIG. ~~2~~ 2.1 produces ~~12~~ 24 forward gears as does the gearbox in FIG. 2.

Please replace the paragraph beginning on page 7, line 6 with the following rewritten paragraph.

For making the most efficient gearbox the gears in the gearsets should all be sized to be degrees of a common ratio in a geometric sequence and the ratio of torques to the number of gears and shafts should be maximized. In the embodiments shown herein there are between ~~14~~ 17 and ~~22~~ 25 gears on ~~in each~~ gearboxes having between 3 and 5 shafts for an average ratio of torques to gears and shafts of ~~189~~155%. Specifically, the torques (both forward and reverse) over gears plus shafts for the six embodiments shown in FIG 1, 2, 3, 4, 5 and 6 are 36/(17+5), 48/(20+5), 36/(20+4), 30/(22+3), 48/(25+5) and 36/(21+4), respectively.

Please replace the paragraph beginning at page 7, line 27 with the following rewritten paragraph:

~~Gear~~ Pinion 115 meshes with ~~pinion~~ gear 119 to form gearset 117 having a ratio of 1 and turns second intermediate shaft 104 if ~~pinion~~ gear 119 is selected in double synchronizer clutch 121.

Please replace the paragraph beginning at page 7, line 29 with the following rewritten paragraph:

~~Gear~~ Pinion 116 meshes with ~~pinion~~ gear 120 to form gearset 118 having a ratio of R^2, where ~~pinion~~ gear 120 is selected in double synchronizer clutch 121 ~~with R being the degree of common ratio in the geometric sequence~~. The gearsets 117 and 118 between the first intermediate shaft 103 and the second intermediate shaft 104, are unit D gearsets. Four gearsets 112, 113, 117 and 118 of the two units C and D have two join gears 115 and 116 on the first intermediate shaft 103. Gearset 118 has a ratio of R^2 ~~$1/R^2$~~ and has a difference in value of R from gearset 113, which has a ratio of $1/R^3$ ~~R^3~~. In the embodiment shown the teeth of pinion 118 were addendum shifted to make the teeth mesh properly.

Please replace the paragraph beginning at page 8, line 6 with the following rewritten paragraph:

When pinion 122 in single synchronizer clutch 124 is selected to engage first intermediate shaft 103 it turns second intermediate shaft 104 by meshing with gear 125 forming gearset 123 with a ratio of ~~1/R~~R. Gearsets 117, 118 and 123 ~~is a~~are unit D ~~gearset~~gearsets. ~~Gear~~ Pinion 125 on second intermediate shaft 104 also meshes with ~~pinion~~ gear 127 forming gearset 126 having ratio $1/R^2$. When gear 127 in single synchronizer clutch 128 is selected, power is transmitted to third intermediate shaft 105 by pinion ~~127~~125.

Please replace the paragraph beginning at page 8, line 11 with the following rewritten paragraph:

Second intermediate shaft 104 can also transmit power to third intermediate shaft 105 by use of single synchronizer clutch 135 having pinion 133 which meshes with gear 136 to form gearset 134 ~~with~~ having a ratio ~~1 to~~ $1/R^8$. Gearsets 126 and 134 are unit B gearsets.

Please replace the paragraph beginning at page 8, line 14 with the following rewritten paragraph:

Third intermediate shaft 105 has two ways to transmit power to the differential shaft 106. As the third intermediate 105 is turned, it turns gear 136 engaging and turning differential shaft 106 by pinion138 on single synchronizer clutch 139 when pinion 138 is selected and engages differential shaft 106 to form gearset 137 having a ratio of 1. Third intermediate shaft 105 can also transmit power to the differential shaft 106 by way of single synchronizer clutch 131 having pinion 129 which meshes with gear 132 to form gearset 130 with a ratio of ~~1 to~~ $1/R^{12}$. Gearsets 130 and 137 are unit A gearsets.

Please replace the paragraph beginning at page 8, line 30 with the following rewritten paragraph:

In the gearbox depicted in Fig. 1 there are 36 torques, 24 forward and 12 reverse, using ~~14~~ 17 gears and 5 shafts for a torque to gears and shafts ratio of $36/(\text{~~14~~}17+5) = \text{~~1.9~~}1.64$.

Please replace the paragraph beginning at page 9, line 1 with the following rewritten paragraph:

As shown in the table of Fig. 1B the combinations of gears yield one gearset from the ~~of~~ two possibilities 1 or $1/R^{12}$ in unit A, one gearset from the ~~of~~ two possibilities $1/R^2$ or $1/R^8$ in unit B, one gearset from the ~~of~~ two possibilities 1 or $1/R^3$ in unit C and one gearset from the ~~of~~ three possibilities 1, ~~1/R~~R or R^2 ~~$1/R^2$~~ in unit D for a total of 24 forward gear combinations and 12 reverse gears.

Please replace the paragraph beginning at page 9, line 6 with the following rewritten paragraph:

There is a uniform separation in the degree of the common ratio of the gearsets in each unit. The degree of common ratios of separation is calculated based on the number of forward gears or torques in the gearbox divided by the number of gearsets in the unit. In gearbox 100 shown in Fig. 1 there are 4 units A, B, C and D with 2, 2, 2, and 3 gearsets respectively. The common ratio degree of separation in the geometric sequence of the unit A is 12 degrees since

there are 2 gearsets in unit A and 24 forward gears, (24/2=12). Therefore the separation in the common ratio of the geometric sequence is of the 12^{th} degree in unit A. If one of the gearsets in unit A has a ratio of 1 the second gearset has ratio of $1/R^{12}$ or R^{12}. Here by design choice the gearsets have the ratios of 1 and $1/R^{12}$. Unit B has 2 gearsets with a separation of 6 degrees in the common ratio of the geometric sequence since there are remaining 12 combinations of gearsets that can be used and 2 gearsets in unit B, (12/2=6). If the first gearset in unit B has a ratio of $1/R^2$, then the second gearset has a ratio of $1/R^8$, which is a common ratio of 6 degrees different from the first gearset. The choice of $1/R^2$ and $1/R^8$ are a matter of design choice but the six degrees of separation is part of the gearbox formula. Since unit C has 2 gearsets with 6 remaining combinations of gearsets, out of the original 24 combinations, there are three degrees of separation in unit C (6/2=3). If the first gearset in unit C has a ratio in the geometric sequence of 1 by design choice, then the second gearset will have three degrees of separation such as R^3 or $1/R^3$. In gearbox 100 the ratio selected is $1/R^3$ by design choice. The remaining 3 gearsets have one degree of separation in the common ratio of the geometric sequence. In gearbox 100 the ratios selected in unit D are 1, R and R^2 by design choice. In order for the gearbox to have an input to output ratio of 1 to 1 the gearbox can have a gearset ratio selection in the units of $1x1x1/R^2x\ R^2=1$.

Please replace the paragraph beginning at page 9, line 28 with the following rewritten paragraph:

In the second embodiment, gearbox 200, as shown in Fig. 2 and Fig. 2.1 there are 36 gears of forward speeds and 24 reverse speeds. ~~Due~~ In addition, due to the split shaft (202, 204 connected by clutch 250), there can be 4 forward speeds and 4 reverse speeds available for a power take off on the split shaft.

Please replace the paragraph beginning at page 11, line 9 with the following rewritten paragraph:

Pinion 228 and pinion 229 are in double synchronizer clutch 232 and may be separately selected. When pinion 228 in double synchronizer clutch 232 is selected to engage second

intermediate shaft 204 it turns third intermediate shaft 205 by meshing with join gear 233 forming gearset 230 with a ratio of R^8. Gearset 230 is between second intermediate shaft 204 and third intermediate shaft 205 such that the third intermediate shaft 205 turns at a rate of R^8 compared to ~~first~~ second intermediate shaft ~~203~~204.

Please replace the paragraph beginning at page 11, line 15 with the following rewritten paragraph:

When pinion 229 in double synchronizer clutch 232 is selected to engage second intermediate shaft 204 it turns third intermediate shaft 205 by meshing with gear 234 forming gearset 231 with a ratio of R^5. Gearset 231 is between second intermediate shaft 204 and third intermediate shaft 205 such that the third intermediate shaft 205 turns at a rate of R^5 compared to second intermediate shaft ~~203~~204.

Please replace the paragraph beginning at page 11, line 22 with the following rewritten paragraph:

There are three possible ways to transmit power from the third intermediate shaft 205 to the differential shaft 206. Pinion 237 and pinion 238 are in double synchronizer clutch 239 and may be separately selected. As a third intermediate shaft 205 is turned it turns join gear 233 engaging and turning differential shaft 206 by pinion 237 on double synchronizer clutch 239 when pinion 237 is selected and engages differential shaft 206 to form gearset 235 with a ratio of $1/R^8$. Gearset 235 connects the third intermediate shaft 205 to the differential shaft 206 such that it turns at a rate of 1 to $1/R^8$. As second intermediate shaft 204 is turned it turns join gear 234 engaging and turning third intermediate shaft 205 by pinion 238 on double synchronizer clutch 239 when pinion 238 is selected and engages differential shaft 206 to form gearset 236 with a ratio of $1/R^4$. Gearset 236 connects the third intermediate shaft 205 such that the differential shaft 206 turns at a rate of 1 to R^4 compared to third intermediate shaft 205.

Please replace the paragraph beginning at page 12, line 2 with the following rewritten paragraph:

Four gearsets 230, 231,235 and 236 of the two units B and D have two join gears 233 and 234 on the third intermediate shaft 205. For spacing of the shaft, purposed gearset 236 with a ratio of $1/R^4$ is paired with gearset 236 with a ratio of R^5 and gearset 230 with a ratio of R^8 and gearset 235 with a ratio of $1/R^8$ are paired. By design choice the teeth of pinion 238 were addendum modification shifted to mesh with the teeth on join gear 234.

Please replace the paragraph beginning at page 12, line 22 with the following rewritten paragraph:

Alternatively, second intermediate shaft 204 can receive power by engaging synchronizer clutch 250 on the split shaft when power is connected to outward end 271 of drive shaft 202 or by directly connecting second intermediate shaft 204 to the power source at outward end 272. The power then flows through the gearbox 200 from second intermediate shaft 204 to third intermediate shaft 205 to the differential shaft 206 by use of the 4 gearsets in unit D and the 3 gearsets of unit B operated as described above. The ratios of the gearsets are shown in Fig. 2D which is a subset of the gearsets of Fig. 2B. The output gear ratios are the combintions of the ratios in Unit B and Unit D which will produce ratios R^8 , R^7 , R^6 , R^5 , R^4 , R^3 , R^2 , R , 1 , 1/R , $1/R^2$ and $1/R^3$ which overlap some of the results which can be obtained by using units A, B, D and S. The overlapping resultant ratios are 1-, 1/R , $1/R^2$ and $1/R^3$ obtained by the use of gearset 211 with a ratio of <u>1/R12</u>^{8}~~1/R12~~^{12} of unit S applied to the unit B and unit D results, so there are two ways to obtain these gear ratios using gearbox 200.

Please replace the paragraph beginning at page 13, line 3 with the following rewritten paragraph:

Fig. 2.1 shows a variation of Fig. 2 with the shafts turned around such that the other side of the gear teeth are used as shown in Fig. 2.1P. Power enters the gearbox 200 from outward end 272 on split second intermediate shaft 204 and can be transferred to first intermediate shaft 203 then to split drive shaft 202 by use of <u>pinions 219 and 220 meshed to gears 214 and 215</u>~~pinion~~

~~214 and pinion 215 are~~ in double synchronizer clutch 218 which may be separately selected. As a second intermediate shaft 204 is turned, it turns ~~gear~~ pinion 220 engaging and turning first intermediate shaft 203 by ~~pinion~~ gear 215 on double synchronizer clutch 218 when pinion ~~215~~ 220 is selected and engages first intermediate shaft 203 to form gearset 217 with ratio of 1. Gearset 217 connects the second intermediate shaft 204 such that the first intermediate shaft 203 turns at a rate of 1 to 1. As a second intermediate shaft 204 is turned, it turns ~~gear~~ pinion 219 engaging and turning first intermediate shaft 203 by ~~pinion~~ gear 214 on double synchronizer clutch 218 when ~~pinion~~ gear 214 is selected and engages first intermediate shaft 203 to form gearset 216 with a ratio of R^{12}. Gearset 216 connects the second intermediate shaft 204 such that the first intermediate shaft 203 turns at a rate of 1 to R^{12}.

Please replace the paragraph beginning at page 13, line 18 with the following rewritten paragraph:

As a first intermediate shaft 203 is turned, it turns ~~gear~~ pinion 213 engaging and turning drive shaft 202 by ~~pinion~~ gear 210 on double synchronizer clutch 212 when ~~pinion~~ gear 210 is selected and engages drive shaft 202 to form gearset 211 with ratio of ~~R~~^{12}R^{8}. Gearset 211 connects the first intermediate shaft 203 to drive shaft ~~203~~ 202 such that drive shaft ~~203~~ 202 turns at a rate of 1 to ~~R~~^{12}R^{8}. The gearset 211 between ~~second~~ first intermediate shaft ~~204~~ 203 and ~~first intermediate~~drive shaft ~~203~~ 202 is a unit S1 gearset.

Please replace the paragraph beginning at page 13, line 24 with the following rewritten paragraph:

As first intermediate shaft 203 is turned, it turns reverse ~~gear~~ pinion 209 engaging and turning the idle gear 208 for engaging and turning drive shaft 202 when ~~pinion~~ gear 207 on double synchronizer clutch 212 is selected and engages drive shaft 202.

Please replace the paragraph beginning at page 14, line 5 with the following rewritten paragraph:

As shown the table in Fig. 2B, the combinations of gears yield two ratios of gearsets from the ~~of~~ two possibilities 1 and $1/R^{12}$ in unit A, three ratios of gearsets from the ~~of two~~ three possibilities $1/R^4$, $1/R^8$ and 1 in unit B, four ratios of gearsets from the ~~of~~ four possibilities R^5, R^6, R^7 and R^8 in unit D one ratio of gearset $1/R^8$ ~~$1/R^{12}$~~ unit S for a total of 24 forward gear combinations and 24 reverse gears.

Please replace the paragraph beginning at page 14, line 10 with the following rewritten paragraph:

As shown the table in Fig. 2D, the combinations of gears yield three ratios of gearsets from the ~~of two~~three possibilities ~~R^4~~ $1/R^8$, $1/R^4$ and 1 in unit B, four ratios of gearsets from the of four possibilities R^5, R^6, R^7 and R^8 in unit D for a total of 12 forward gear combinations.

Please replace the paragraph beginning at page 14, line 13 with the following rewritten paragraph:

As shown the table in Fig. 2F, the combinations of gears yield two ratios of gearsets from the of two possibilities 1 and $1/R^{12}$ in unit A, and one ratio in gearset $1/R^8$ ~~$1/R^{12}$~~ unit S for a total of 2 forward gear combinations and 2 reverse gears.

Please replace the paragraph beginning at page 14, line 20 with the following rewritten paragraph:

As shown the table in Fig. 2.1F, the combinations of gears yield two ratios of gearsets from the of two possibilities 1 and R^{12} in unit A1, and one ratio $1/R^8$ ~~R^{12}~~ for the gearset in unit S1 for a total of 2 forward gear combinations and 2 reverse gears.

Please replace the paragraph beginning at page 14, line 23 with the following rewritten paragraph:

In Fig. 2 the degree of common ratio in the geometric sequence for the 1x2x3x4 gearbox of units S, A, B and D respectively having 24 forward gears ~~and a direct gear~~, is 12 degrees for unit A, since there a 2 gearsets in unit A and 24 in all. 24/2=12, therefore the common ratio of gearsets in unit A has a ratio of 12^{th} degree. If the first gearset is selected by design choice to

have a ratio of 1 the second gearset will have 12 degrees of separation and has a ratio of $1/R^{12}$. There are 12 combinations of gearsets remaining. Unit B has three gearsets. 12/3=4, therefore the gearsets in unit B differ by four degrees of common ratio in the geometric sequence. Therefore, the degrees of common ratio by design choice can be $1/R^{8}$~~R^{4}~~, $1/R^{4}$ and 1. In unit D there are four gearsets to choose from for one degree of common ratio in the geometric sequence between gearsets ratios. The degrees of common ratio by design choice can be R^{8}, R^{7}, R^{6} and R^{5}. Therefore fixed gearset of unit S may have ratio of $1/R^{8}$ which is selected by design choice to provide the gearbox with the desired output torques. In order to have a 1 to 1 input to output ratio from the gearbox the gearset choices of $1x1x1/R^{8}xR^{8}=1$ can be made.

Please replace the paragraph beginning at page 15, line 30 with the following rewritten paragraph:

When pinion 328 in double synchronizer clutch 332 is selected it engages first intermediate shaft 303, and engages and turns gear 333 on second intermediate shaft 304 to form gearset 330 with a ratio of R^{2}~~R^{3}~~. Gearset 330 connects first intermediate shaft 303 and second intermediate shaft 304 such that the second intermediate shaft 304 turns at a rate of 1 to R^{2} relative to first intermediate shaft 303. . When pinion 329 in double synchronizer clutch 332 is selected it engages first intermediate shaft 303,and engages and turns gear 334 on second intermediate shaft 304 to form gearset 331 with a ratio of R. Gearset 331 connects first intermediate shaft 303 and second intermediate shaft 304 such that the second intermediate shaft 304 turns at a rate 1 to R relative to first intermediate shaft 303.

Please replace the paragraph beginning at page 16, line 8 with the following rewritten paragraph:

When gear ~~pinion~~ 318 is selected it engages second intermediate shaft 304, and engages and is turned by join ~~gear~~ pinion 314 on first intermediate shaft 303 to form gearset 316 with a ratio of 1 to 1. Gearset 316 connects first intermediate shaft 303 and second intermediate shaft

304 such that second intermediate shaft 304 turns at a rate 1 to 1 relative to first intermediate shaft 303.

Please replace the paragraph beginning at page 16, line 12 with the following rewritten paragraph:

When ~~pinion~~ gear 319 is selected it engages second intermediate shaft 304, and engages and is turned by join ~~gear~~ pinion 315 on first intermediate shaft 303 to form gearset 317 with a ratio of ~~1 to~~ R^5. Gearset 317 connects first intermediate shaft 303 and second intermediate shaft 304 such that second intermediate shaft 304 turns at rate 1 to R^5 relative to first intermediate shaft 303.

Please replace the paragraph beginning at page 16, line 16 with the following rewritten paragraph:

Gearset 316, 317, 323, 324, 330, 331 are unit D gearsets. Gearsets 311, 312, 316 and 317 of units B and D have join gears 315 and 316 on the first intermediate shaft 303. Gearset 317 has a ratio of ~~1/R~~ R^6 R^5 and different by geometric ratio R from inverse ratio of $1/R^6$ ~~R^5~~ of gearset 312 By design choice, teeth of pinion 319 are addendum shifted to adjust for the difference of the common ratio R between the two gearsets. Similarly the size R^5 of gearset 317 is different than the size of ratio $1/R^6$ of gearset 312 of unit B by the geometric ratio R when it is installed with join gear 315. For installing both gearsets together, it is necessary to do use addendum shifting the teeth in pinion 319.

Please replace the paragraph beginning at page 16, line 24 with the following rewritten paragraph:

When pinion 338 in synchronizer clutch 340 is selected it engages second intermediate shaft 304, and engages and turns gear 341 on differential shaft 305 to form gearset 339 with a ratio of $1/R^{17}$. Gearset 339 connects second intermediate shaft 304 and the differential shaft 305 such that the differential shaft 305 turns at a rate 1 to $1/R^{17}$ compared to second intermediate shaft 304. As second intermediate shaft 304 is turned it turns join ~~gear~~ pinion 334 forming

gearset 335 with a ratio of $1/R^5$. Join ~~gear~~ pinion 334 also engages and turns ~~pinion~~ gear 336 in single synchronizer clutch 337 on differential shaft 305. Gearset 335 connects second intermediate shaft 304 and the differential shaft 305 such that the differential shaft 305 turns at a rate 1 to ~~R^5~~ $1/R^5$ compared to second intermediate shaft 304. Gearset 335 and 339 are unit A gearsets.

Please replace the paragraph beginning at page 17, line 12 with the following rewritten paragraph:

There are 36 torques, 24 forward and 12 reverse on ~~17~~ 20 gears and 4 shafts for a torque to gears and shafts ratio of $36/(\text{~~17~~}20+4) = \text{~~1.7~~}1.5$.

Please replace the paragraph beginning at page 17, line 14 with the following rewritten paragraph:

As shown the table in Fig. 3B the combinations of gears yield two ratios of gearsets from the ~~of~~ two possibilities $1/R^5$ and $1/R^{17}$ in unit A, two ratios of gearsets from the ~~of~~ two possibilities $1/R^6$ and 1 in unit B, six ratios of gearsets from the ~~of~~ six possibilities 1, R, R^2, R^3, R^4 and R^5 in unit D for a total of 24 forward gear combinations and 12 reverse gears.

Please replace the paragraph beginning at page 17, line 18 with the following rewritten paragraph:

In Fig. 3B the degree of separation between the ratios in the gearsets for the ratio in the geometric sequence in the 2x2x6 gearbox having 24 gears~~,~~ is 12 for unit A~~,~~. ~~since~~ Since there ~~a~~ are 2 gearsets in unit A and 24 in all~~,~~, 24/2=12, therefore the difference in the a common ratio is of the 12^{th} degree in unit A. If the first gearset is selected by design choice to have a ratio of $1/R^5$ the second gearset will have 12 degrees of separation and has a ratio of $1/R^{17}$. There are 12 combinations of gearsets remaining. Unit B has two gearsets~~,~~, 12/2=6~~,~~. ~~therefore~~ Therefore the gearsets in unit B differ by six degrees of common ratio in the geometric sequence. Therefore the degrees of common ratio by design choice can be $1/R^6$ and 1. In unit D are six gearsets and 6 remaining gears from the original 24 to choose from for a one degree of common ratio in the

geometric sequence between gearsets. The degrees of common ratio by design choice can be 1, R, R^2, R^3, R^4, R^5 in unit D. To obtain a 1 to 1 input to output in the gearbox the gearsets having rations of $1x1/R^5xR^5=1$ may be selected.

Please replace the paragraph beginning at page 18, line 30 with the following rewritten paragraph:

When pinion 437 in double synchronizer clutch 441 is selected to engage intermediate shaft 403 it turns differential shaft 404 by meshing with gear 442 on the differential 460 to form gearset 439 having a ratio of 1 to R^6. Gearset 439 is between intermediate shaft 403 and differential shaft 404 such that the differential shaft 404 turns at a rate 1 to R^6 relative to the intermediate shaft 403. When pinion 438 in double synchronizer clutch 441 is selected to engage intermediate shaft 403 it turns the differential shaft 404 by meshing with gear 443 on the differential 460 to form gearset 440 with a ratio of 1 to $1/R^{12}$. Gearset 440 is between intermediate shaft 403 and the differential shaft 404 such that the differential shaft 404 turns at a rate of 1 to $\underline{1/R^{12}}$ ~~R^{12}~~ compared to intermediate shaft 403.

Please replace the paragraph beginning at page 19, line 8 with the following rewritten paragraph:

When pinion 433 in single synchronizer clutch 435 is selected it engages intermediate shaft 403,and engages and turns gear 436 on the differential 460 to form gearset 434 with a ratio of 1 to 1. Gearset 434 connects intermediate shaft 403 and differential shaft 404 such that the differential shaft 404 turns at a rate 1 to 1 relative to intermediate shaft 403. As intermediate shaft 403 is turned it turns ~~gear~~ pinion 429 engaging and turning differential shaft 404 by ~~pinion~~ gear 431 on single synchronizer clutch 432 when ~~pinion~~ gear 431 is selected and differential shaft 404 to form gearset 430 with ratio of 1 to R^6. Gearset 430 connects intermediate shaft 403 and differential shaft 404 such that the differential shaft 404 turns at a rate 1 to R^6 compared to intermediate shaft 403.

Please replace the paragraph beginning at page 19, line 27 with the following rewritten paragraph:

There are 30 torques, 24 forward and 6 reverse on ~~19~~ 22 gears and 3 shafts for a torque to gears and shafts ratio of 30/(~~19~~22+3) = ~~1.36~~1.2.

Please replace the paragraph beginning at page 20, line 2 with the following rewritten paragraph:

In Fig. 4B the degree of separation for the ratio in the geometric sequence for the 4x6 gearbox having 24 gears~~,~~ is 6 for unit A, since there a 4 gearsets in unit A and 24 in all~~.~~ , 24/4=6~~,~~ , ~~therefore~~ Therefore the ratios of gearsets in unit A ~~has~~ have a separation in the common ratio of 6^{th} degree. If the first gearset is selected by design choice to have a ratio of R^6~~,~~ the second gearset will have 6 degrees of separation and have a ratio of 1, the third gearset will have 6 degrees of separation and have a ratio of $1/R^6$, and the fourth gearset will have 6 degrees of separation and have a ratio of $1/R^{12}$. There are 6 combinations of gearsets remaining. Unit D has six gearsets~~.~~ , 6/6=1~~,~~ . ~~therefore~~ Therefore the gearsets in unit D differ by one degree of common ratio in the geometric sequence. In unit D are six gearsets and 6 remaining gears from the original 24 to choose from for a one degree of common ratio in the geometric sequence between ratios of gearsets. Therefore the degrees of common ratio by design choice can be ~~1/R6~~$1/R^6$, $1/R^7$, $1/R^{8}$~~/R^8~~, $1/R^9$, $1/R^{10}$ and $1/R^{11}$. To provide a gearbox with a 1 to 1 input to output gearsetscan be chosen having values $1/R^6 x R^6=1$.

Please replace the paragraph beginning at page 20, line 18 with the following rewritten paragraph:

Power enters the left side of gearbox 500 on outward end 571 of the drive shaft 502 or on opposite outward end 572 if the shafts are reversed for using the opposite side of the gears teeth. Drive shaft 502 passes through double synchronizer clutch 510. Pinion 511 and reverse pinion 507 are in double synchronizer clutch 510 and may be separately selected. When pinion 511 is selected it engages drive shaft 502, and engages and turns gear 513 on first intermediate shaft

503 to form gearset 512 with ratio 1 to ~~of~~ R^3. Gearset 512 connects drive shaft 502 and the first intermediate shaft 503 such that the first intermediate shaft 503 turns at a rate depending on the ratio of the gears in the gearset 512. When reverse pinion 507 is selected it engages drive shaft 502, and engages and turns idle gear 508 and reverse gear 509 on intermediate shaft 503.

Please replace the paragraph beginning at page 20, line 29 with the following rewritten paragraph:

There are three possible ways to transmit power from the first intermediate shaft 503 to the second intermediate shaft 504. As first intermediate shaft 503 is turned it turns join ~~gear~~ pinion 513 engaging and turning second intermediate shaft 504 by ~~pinion~~ gear 515 on single synchronizer clutch 516 when ~~pinion~~ gear 515 is selected and engages second intermediate shaft 505 to form gearset 514 with a ratio of 1 to $1/R^8$. Gearset 514 connects the first intermediate shaft 503 such that the second intermediate shaft 504 turns at a rate of 1 to $1/R^8$. Pinions 517 and 518 are in double synchronizer clutch 521 and may be separately selected. When pinion 517 on first intermediate shaft 503 is selected, it engages and turns join gear 522 on second intermediate shaft 504 to form gearset 519 with ratio of R^8. Gearset 519 is between first intermediate shaft 503 and the second intermediate shaft 504 such that the second intermediate shaft 504 turns at a rate depending on the ratio of the gears in the gearset 519. When pinion 518 on first intermediate shaft 503 is selected, it engages and turns gear 523 on second intermediate shaft 504 to form gearset 520 with ratio of 1 to 1. Gearset 520 is between first intermediate shaft 503 and the second intermediate shaft 504 such that the second intermediate shaft 504 turns at a rate 1 to 1 compared to first intermediate shaft 503.

Please replace the paragraph beginning at page 21, line 15 with the following rewritten paragraph:

There are eight possible ways to transmit power from the second intermediate shaft 504 to the third intermediate shaft 505. ~~Pinion~~ Gear 526 and ~~pinion~~ gear 527 are in double synchronizer clutch 528 and may be separately selected. As a second intermediate shaft 504 is

turned it turns join ~~gear~~ pinion 522 engaging and turning third intermediate shaft 505 by ~~pinion~~ gear 526 on double synchronizer clutch 528. When ~~pinion~~ gear 526 is selected it engages third intermediate shaft 505 to form gearset 524 with ratio of ~~1/R~~1/R^8. Gearset 524 connects the second intermediate shaft 504 such that the third intermediate shaft 505 turns at a rate of 1 to ~~R~~1/R^8. As a second intermediate shaft 504 is turned it turns join ~~gear~~ pinion 523 which engages and turns second intermediate shaft 504 by ~~pinion~~ gear 527 on double synchronizer clutch 528 when ~~pinion~~ gear 527 is selected and engages third intermediate shaft 505 to form gearset 525 with ratio of ~~R~~^{8}1/R. Gearset 525 connects the second intermediate shaft 504 such that the third intermediate shaft 505 turns at a rate of 1 to ~~R~~^{8}1/R compared to second intermediate shaft 504.

Please replace the paragraph beginning at page 21, line 27 with the following rewritten paragraph:

Four gearsets 519, 520, 524 and 525 of the two units ~~B~~ A and D have two join gears 522 and 523 on the second intermediate shaft 504. Gearset 520 with a ratio of 1 is different by geometric ratio R from ratio of 1/R of gearset 525. By design choice, teeth of pinion 527 were addendum modification shifted to make the gear teeth mesh due to the difference in gear size.

Please replace the paragraph beginning at page 22, line 22 with the following rewritten paragraph:

Pinions 543 and 544 are in double synchronizer clutch 547 and may be separately selected. When pinion 543 in double synchronizer clutch 547 is selected to engage second intermediate shaft 504 it turns third intermediate shaft 505 by meshing with gear 548 forming gearset 545 with a ratio of 1/R^6. Gearset 545 is between second intermediate shaft 504 and third intermediate shaft 505 such that the third intermediate shaft 505 turns at a rate 1 to 1/R^6~~R~~^{6}compared to second intermediate shaft 503.

Please replace the paragraph beginning at page 22, line 28 with the following rewritten paragraph:

When pinion 544 in double synchronizer clutch 540 is selected to engage second intermediate shaft 504 it turns third intermediate shaft 505 by meshing with gear 549 forming gearset 546 with a ratio of $1/R^7$. Gearset 546 is between second intermediate shaft 504 and the third intermediate shaft 505 such that the third intermediate shaft 505 turns at a rate 1 to $1/R^7$~~R^7~~ compared to second intermediate shaft 503.

Please replace the paragraph beginning at page 23, line 4 with the following rewritten paragraph:

As third intermediate shaft 505 is turned it turns join gear 535 engaging and turning differential shaft 506 by gear 551 on differential 560 engaging differential shaft 506 to form gearset 550 with a ratio of 1 to $1/R^{10}$. Gearset 550 connects the third intermediate shaft 505 such that the differential shaft 506 turns at a rate of 1 to $1/R^{10}$~~R^{10}~~ compared to third intermediate shaft 504. Gearset 550 is a unit S2 gearset.

Please replace the paragraph beginning at page 23, line 19 with the following rewritten paragraph:

There are 48 torques 24 forward and 24 reverse on ~~22~~25 gears and 5 shafts for a torque to gears and shafts ratio of 48/(~~22~~25+5) = ~~1.78~~1.6.

Please replace the paragraph beginning at page 23, line 25 with the following rewritten paragraph:

In gearbox 500 the degree of common ratio in the geometric sequence for the 1x1x3x8 gearbox having 24 gears~~,~~ is 8 for unit A, since there 3 gearsets in Unit A and 24 in all~~,~~ 24/3=8~~,~~ ~~therefore~~ Therefore the common ratio of gearsets in unit A is a common ratio of 8^{th} degree in the geometric sequence. If the first gearset is selected by a ratio of R^8 the second gearsets can have a ratio of 1, and the third gearset can have a ratio of $1/R^8$. There are 8 combinations of gearsets remaining and unit D has eight gearsets~~,~~ 8/8=1, so the gearsets in unit D differ by 1 degree of the common ratio in the geometric sequence. The degrees of common ratio in the geometric

sequence were selected by design choice to be $1/R$, $1/R^2$, $1/R^3$, $1/R^4$, $1/R^5$, $1/R^6$, $1/R^7$, and $1/R^8$ in unit D. The standard of fixed gearsets S1 and S2 ~~we~~ were selected by design choice to be R^3 ~~$1/R^3$~~ and $1/R^{10}$. In order to provice a 1 to 1 input to output ratio of the gearbox the units can be selected as $R^3 \times 1/R \times 1/R^{10} \times R^8=1$.

Please replace the paragraph beginning at page 24, line 5 with the following rewritten paragraph:

In the sixth embodiment shown in FIG.6 there are 24 gears of forward and 12 reverse speeds available from gearbox 600. Gearbox 600 has 4 frames members 645, 601, 611 and 625. Supported split drive shaft 646 in frame member 645 is connected by clutch 651 to split drive shaft 602 in frame member 601. First split intermediate shaft 647 in frame member 645 is connected by clutch 652 to first split intermediate shaft 603 in frame member 601 which is connected by clutch 653 to first split intermediate shaft 612 in frame member 611. Second split intermediate shaft 613 in frame member 611 is connected by clutch 654 to second split intermediate shaft 626 ~~i~~ in frame member 625. Differential shaft 627 is affixed to differential 660 in frame member 625.

Please replace the paragraph beginning at page 25, line 1 with the following rewritten paragraph:

Split drive shaft 646 is connected by clutch 651 to split drive shaft 602. Split drive shaft 646 passes through reverse pinion 648 and split drive shaft 602 passes through pinions 604, 605 ~~are~~ in double synchronizer clutch 608. Pinions 604, 605 and may be separately selected for engaging split drive shaft 602. When reverse pinion 648 is selected it engages and turns split first intermediate shaft 647 connected by clutch 652 to split first intermediate shaft 603. As can be seen in Fig. 6, the reverse mechanism may have 2 locations between 4 shafts supported by 4 frame members having 3 split shafts to provide 4 or 8 reverse gears.

Please replace the paragraph beginning at page 26, line 10 with the following rewritten paragraph:

There are 36 torques 24 forward and 12 reverse on ~~18~~ 21 gears and 4 shafts having 3 split shafts supported by 4 frames members for a torques to gears and shafts ratio of 36/(~~18~~21+5) = ~~1.5~~1.38.

Please replace the paragraph beginning at page 26, line 12 with the following rewritten paragraph:

As shown the table in Fig. 6B the combinations of gears yield two ratios of gearsets from the of two possibilities R^6 and $1/R^6$ in unit A, three ratios of gearsets from the of three possibilities $1/R^8$~~R^8~~, $1/R^4$ and 1 in unit B, and four ratios of gearsets from the of four possibilities $1/R^6$, $1/R^7$, $1/R^8$ and $1/R^9$ in unit D.

Please replace the paragraph beginning at page 26, line 16 with the following rewritten paragraph:

In Fig. 6 the degree of the common ratio in the geometric sequence for the 2x3x4 gearbox having 24 gears~~,~~ is 12 for unit A, since there a 2 gearsets in unit A and 24 in all~~.~~ 24/2=12~~,~~ ~~therefore~~ Therefore the common ratio of gearsets in the unit A is a common ratio of 12^{th} degree in the geometric sequence. If the first gearset is selected by a ratio of R^6 the second gearset can have a ratio of $1/R^6$.

Please replace the paragraph beginning at page 26, line 25 with the following rewritten paragraph:

There are 4 combinations of gearsets remaining and unit D has four gearsets~~.~~ 4/4=1, so the gearsets in the unit D differ by 1 degree of common ratios in the geometric sequence. The degrees of common ratio in the geometric sequence were selected by design choice to be 1/R6, 1/R7, 1/R8 and 1/R9 in unit D. In order to provide a 1 to 1 input to output in gearbox 600 the unit values of 1x1/R6xR6=1 may be selected.

Please replace FIG 1A, 1B, 2A, 2B, 2C, 2D, 2E, 2F, 2.1A, 2.1B, 2.1 E, 2.1F, 3A, 3B, 4A, 4B, 5A, 5B, 6A, and 6B with the rewritten FIG 1A, 1B, 2A, 2B, 2C, 2D, 2E, 2F, 2.1A, 2.1B, 2.1 E, 2.1F, 3A, 3B, 4A, 4B, 5A, 5B, 6A that correctly relate to FIG 1, 2, 2.1, 3, 4, 5, and 6:

FIG. 1A
COMBINATIONS OF ENGAGABLE PINIONS

FORWARD TORQUES	2 PINIONS GROUP C	3 PINIONS GROUP D	2 PINIONS GROUP B	2 PINIONS GROUP A	REVERSE TORQUES	PINION
1	111	115	133	129	1	107
2	111	122	133	129	2	107
3	111	116	133	129	3	107
4	111	115	125	129		
5	111	122	125	129		
6	111	116	125	129		
7	111	115	133	136	4	107
8	111	122	133	136	5	107
9	111	116	133	136	6	107
10	111	115	125	136		
11	111	122	125	136		
12	111	116	125	136		
13	110	115	133	129	7	107
14	110	122	133	129	8	107
15	110	116	133	129	9	107
16	110	115	125	129		
17	110	122	125	129		
18	110	116	125	129		
19	110	115	133	136	10	107
20	110	122	133	136	11	107
21	110	116	133	136	12	107
22	110	115	125	136		
23	110	122	125	136		
24	110	116	125	136		

FIG. 1B
FOUR GROUPS OF NINE GEARSETS WITH DEFINITE RATIOS

GROUP A 2 GEARSETS #/RATIO	GROUP B 2 GEARSETS #/RATIO	GROUP C 2 GEARSETS #/RATIO	GROUP D 3 GEARSETS #/RATIO
137 /1	134 / $1/R^2$	112 / 1	118 / R^2

130 /1/R^{12}	126 / 1/R^{8}	113 / 1/R^{3}	123 / R
			117 / 1

FIG. 2A
COMBINATIONS OF ENGAGABLE PINIONS

FORWARD TORQUES	3 PINIONS GROUP B	4 PINIONS GROUP D	2 PINIONS GROUP A	1 PINION GROUP S	REVERSE TORQUES	PINION
1	233	229	214	210	1	207
2	233	224	214	210	2	207
3	233	219	214	210	3	207
4	233	228	214	210	4	207
5	234	229	214	210	5	207
6	234	224	214	210	6	207
7	234	219	214	210	7	207
8	234	228	214	210	8	207
9	240	229	214	210	9	207
10	240	224	214	210	10	207
11	240	219	214	210	11	207
12	240	228	214	210	12	207
13	233	229	215	210	13	207
14	233	224	215	210	14	207
15	233	219	215	210	15	207
16	233	228	215	210	16	207
17	234	229	215	210	17	207
18	234	224	215	210	18	207
19	234	219	215	210	19	207
20	234	228	215	210	20	207
21	240	229	215	210	21	207
22	240	224	215	210	22	207
23	240	219	215	210	23	207
24	240	228	215	210	24	207

FIG. 2B
FOUR GROUPS OF TEN GEARSETS WITH DEFINITE RATIOS

GROUP A 2 GEARSETS #/RATIO	GROUP B 3 GEARSETS #/RATIO	GROUP D 4 GEARSETS #/RATIO	GROUP S 1 GEARSET #/RATIO
217 / 1	241/ 1	230/ R^{8}	211 / 1/R^{8}
216 / 1/R^{12}	236 / 1/R^{4}	231 / R^{5}	

	235 /1/R^8	225 /R^6	
		221 /R^7	

FIG. 2C
COMBINATIONS OF ENGAGABLE PINIONS
AFTER JOIN TWO SPLIT SHAFTS

FORWARD TORQUES	3 PINIONS GROUP B	4 PINIONS GROUP D
25	233	220
26	233	226
27	233	227
28	233	219
29	234	220
30	234	226
31	234	227
32	234	219
33	240	220
34	240	226
35	240	227
36	240	219

FIG.2D
TWO GROUPS OF SEVEN GEARSETS
WITH DEFINITE RATIOS

GROUP B 3 GEARSETS GEARSET#/ RATIO	GROUP D 4 GEARSETS GEARSET#/ RATIO
241/1	230/ R^8
236/ 1/R^4	231/ R^5
230/ 1/R^8	225/ R^6
	221/ R^7

FIG. 2E
COMBINATIONS OF ENGAGABLE PINIONS FOR
WORKING ORGAN

FORWARD TORQUES	1 PINION GROUP S	2 PINIONS GROUP B	REVERSE TORQUES	PINION

1	210	214	1	207
2	210	215	2	207

FIG. 2F
TWO UNITS WITH SPLIT
SHAFT ENGAGED

GROUP A 2 GEARSETS #/RATIO	GROUP S 1GEARSETS #/RATIO
217/1	211/ $1/R^{8}$
$216/1/R^{12}$	

FIG. 2.1A
DRIVE OPPOSITE SHAFT WITH COMBINATIONS
OF ENGAGABLE PINIONS

FORWARD TORQUES	3 PINIONS GROUP B	4 PINIONS GROUP D
1	233	220
2	233	226
3	233	227
4	233	219
5	234	220
6	234	226
7	234	227
8	234	219
9	240	220
10	240	226
11	240	227
12	240	219

FIG.2.1B
RATIOS FOR GEARSETS SHOWN

GROUP B 3 GEARSETS #/RATIO	GROUP D 4 GEARSETS #/RATIO
241/1	230/ R^{8}

236/ 1/R^4	231/ R^5
230/ 1/R^8	225/ R^6
	221/ R^7

FIG. 2.1E
DRIVE OPPOSITE SHAFT WITH COMBINATIONS OF ENGAGABLE PINIONS FOR WORKING ORGAN

FORWARD TORQUES	2 PINION GROUP A1	2 PINIONS GROUP S1	REVERSE TORQUES	PINION
1	220	210	1	207
2	219	210	2	207

FIG 2.1F
TWO UNITS IF FIRST SPLIT SHAFT JOIN TO WORKING ORGAN

GROUP A1 2 GEARSETS #/RATIO	GROUP S1 1 GEARSETS #/RATIO
219/1	213/ R^8
220/R^{12}	

FIG. 3A
COMBINATIONS OF ENGAGABLE PINIONS

FORWARD TORQUES	2 PINIONS GROUP B	6 PINIONS GROUP D	2 PINIONS GROUP A	REVERSE TORQUES	PINION
1	310	314	338	1	306
2	310	329	338	2	306
3	310	328	338	3	306
4	310	322	338	4	306
5	310	321	338	5	306
6	310	315	338	6	306
7	310	314	334		
8	310	329	334		

9	310	328	334		
10	310	322	334		
11	310	321	334		
12	310	315	334		
13	311	314	338	7	306
14	311	329	338	8	306
15	311	328	338	9	306
16	311	322	338	10	306
17	311	321	338	11	306
18	311	315	338	12	306
19	311	314	334		
20	311	329	334		
21	311	328	334		
22	311	322	334		
23	311	321	334		
24	311	315	334		

FIG. 3B
THREE GROUPS OF TEN GEARSETS
WITH DEFINITE RATIOS

GROUP A 2 GEARSETS #/RATIO	GROUP B 2 GEARSETS #/RATIO	GROUP D 6 GEARSETS #/RATIO
$335 / 1/R^5$	311/ 1	$317 / R^5$
$339 / 1/R^{17}$	$312 / 1/R^6$	$323 / R^4$
		$324 / R^3$
		$330 / R^2$
		331 / R
		316 / 1

FIG. 4A
COMBINATIONS OF ENGAGABLE PINIONS

FORWARD TORQUES	6 PINIONS GROUP D	4 PINIONS GROUP A	REVERSE TORQUES	PINION
1	408	438	1	405
2	409	438		
3	415	438		
4	416	438		

5	423	438	2	405
6	424	438		
7	408	437		
8	409	437		
9	415	437	3	405
10	416	437		
11	423	437		
12	424	437		
13	408	433	4	405
14	409	433		
15	415	433		
16	416	433		
17	423	433	5	405
18	424	433		
19	408	429		
20	409	429		
21	415	429	6	405
22	416	429		
23	423	429		
24	424	429		

FIG. 4B
TWO GROUPS OF TEN GEARSETS
WITH DEFINITE RATIOS

GROUP A 4 GEARSETS #/RATIO	GROUP D 6 GEARSETS #/RATIO
430 / R^6	426 / $1/R^6$
434 / 1	425 / $1/R^7$
439 / $1/R^6$	418 /1 /R^8
440 / $1/R^{12}$	417 /$1/R^9$
	411 / $1/R^{10}$
	410 /$1/R^{11}$

FIG. 5A
COMBINATIONS OF ENGAGABLE PINIONS

FORWARD TORQUES	1 PINION GROUP S1	8 PINIONS GROUP D	3 PINIONS GROUP A	1 PINION GROUP S2	REVERSE TORQUES	PINION
1	511	522	513	535	1	507
2	511	544	513	535	2	507
3	511	543	513	535	3	507
4	511	537	513	535	4	507
5	511	536	513	535	5	507
6	511	530	513	535	6	507
7	511	529	513	535	7	507
8	511	523	513	535	8	507
9	511	522	518	535	9	507
10	511	544	518	535	10	507
11	511	543	518	535	11	507
12	511	537	518	535	12	507
13	511	536	518	535	13	507
14	511	530	518	535	14	507
15	511	529	518	535	15	507
16	511	523	518	535	16	507
17	511	522	517	535	17	507
18	511	544	517	535	18	507
19	511	543	517	535	19	507
20	511	537	517	535	20	507
21	511	536	517	535	21	507
22	511	530	517	535	22	507
23	511	529	517	535	23	507
24	511	523	517	535	24	507

FIG. 5B
FOUR GROUPS OF THIRTEEN GEARSETS WITH DEFINITE RATIOS

GROUP S1 1 GEARSET #/RATIO	GROUP A 3 GEARSETS #/RATIO	GROUP D 8 GEARSETS #/RATIO	GROUP S2 1 GEARSET #/RATIO
$512 / R^3$	$519 / R^8$	$525 / 1/R$	$550 / 1/R^{10}$
	$520 / 1$	$531 / 1/R^2$	
	$514 / 1/R^8$	$532 / 1/R^3$	
		$538 / 1/R^4$	
		$539 / 1/R^5$	

		545 / $1/R^6$	
		546 / $1/R^7$	
		524 /$1/R^8$	

FIG. 6A
COMBINATIONS OF ENGAGABLE PINIONS

FORWARD TORQUES	2 PINIONS GROUP A	3 PINIONS GROUP B	4 PINIONS GROUP D	REVERSE TORQUES	PINION
1	605	621	628	1	648
2	605	621	629	2	648
3	605	621	635	3	648
4	605	621	636	4	648
5	605	615	628	5	648
6	605	615	629	6	648
7	605	615	635		
8	605	615	636		
9	605	614	628		
10	605	614	629		
11	605	614	635		
12	605	614	636		
13	604	621	628	7	648
14	604	621	629	8	648
15	604	621	635	9	648
16	604	621	636	10	648
17	604	615	628	11	648
18	604	615	629	12	648
19	604	615	635		
20	604	615	636		
21	604	614	628		
22	604	614	629		
23	604	614	635		
24	604	614	636		

FIG. 6B
THREE GROUPS OF TEN GEARSETS WITH DEFINITE RATIOS

GROUP A 2 GEARSETS	GROUP B 3 GEARSETS	GROUP D 4 GEARSETS

#/RATIO	#/RATIO	#/RATIO
606 / R^6	616 / 1	638 / $1/R^6$
607 / $1/R^6$	617 / $1/R^4$	637 / $1/R^7$
	622 / $1/R^8$	631 / $1/R^8$
		630 / $1/R^9$